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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,076	08/20/2004	William E. Bernier	FIS920040098US1	5075
29154	7590	03/29/2007	EXAMINER	
FREDERICK W. GIBB, III			FARAHANI, DANA	
Gibb & Rahman, LLC			ART UNIT	
2568-A RIVA ROAD			PAPER NUMBER	
SUITE 304			2891	
ANNAPOLIS, MD 21401				
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/29/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-8, 11-14, 29, and 31-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki (US Patent Application Publication 2002/0171152), in view of Capote et al., hereinafter Capote (US Application 2005/0218517).

Re. claims 1, 4, 8, 11, 29, 31, 32, 36 and 37, Miyazaki discloses in figures 1-3, a carrier 21;

a device 11 connected to the carrier;

solder connectors 14 connecting the device to the carrier;

a compressible film 17 surrounding sides of the solder connectors, wherein the compressible film has sufficient compressibility to accommodate expansion of the solder bumps when they are melted (see paragraphs 62 and 66). The material of the solder connectors could be Sn – Ag based and that of the film could be polyimide based resin, all of which are the same material disclosed as the solder material and the compressible film by applicants, evidencing the have the same properties, i.e. the functional properties of the compressible film and the solder connectors mentioned on lines 6-10 of claims 1, 8, and 29.

Miyazaki does not disclose the insulating material surround the compressible film.

Capote discloses in figure 18, insulators 38 and 40 are between a carrier and device, surrounding the film there between. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to place insulators between the carrier and device of the Miyazaki reference, to further provide mechanical strength for the package.

Re. claims 5, 12, and 33, there are channels 13 filled with insulating material 13.

Re. claims 6, 13, and 34, the pattern of the side of the connectors 14, hence the compressible film comprised diagonal strips.

Re. claims 7, 14, and 35, the pattern of the sides of elements 15 comprises rectangles of said compressible film.

Response to Arguments

3. Applicants' arguments with respect to the previously rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2891

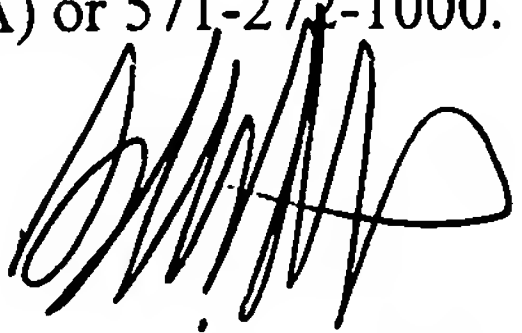
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Farahani whose telephone number is (571)272-1706. The examiner can normally be reached on M-F 9:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on (571)272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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